



# The analysis to the international competitiveness of the labor-intensive industry of China

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## 1. Introduction

The Reforming makes the eastern coastal region of China developed firstly, and the reason of the rapid growth was the labor intensive industry being one part of the international industrial division chain which makes the comparative advantage in this area brought into full play. However, when we faced the Lewis Turning Point ,with the rise of the wage and the labor force structure changes , it is important to know whether or not the labor intensive industry still keep the comparative advantage .

In this research , we first determine 254 industries is the labor-intensive industry according to the ratio of capital to labor . And then based on the UN Comtrade database, the 254 products (HS four digital) was selected as a representative product of the 254 labor-intensive industry. After that ,we using three index analysis the competitiveness which are EV(Export Value) , RCA (Revealed Comparative Advantage Index) , RTV (Revealed Technological Value-Added ) .At last the main industries were selected to be analyzed and the brief conclusion was drawn.

## 2. The Exports Of Labor-Intensive Industry

From the Figure1, we can see that the scale of the global market is declining. In 1995 , the export of labor-intensive industry from all country to the world accounted for 21.85% of the world's total exports. In 2013, the proportion fell to 18.87%. However, china's exports value of labor-intensive products accounted for the proportion of global exports rose from 1.07% in 1995 to 2.77% by 2013.

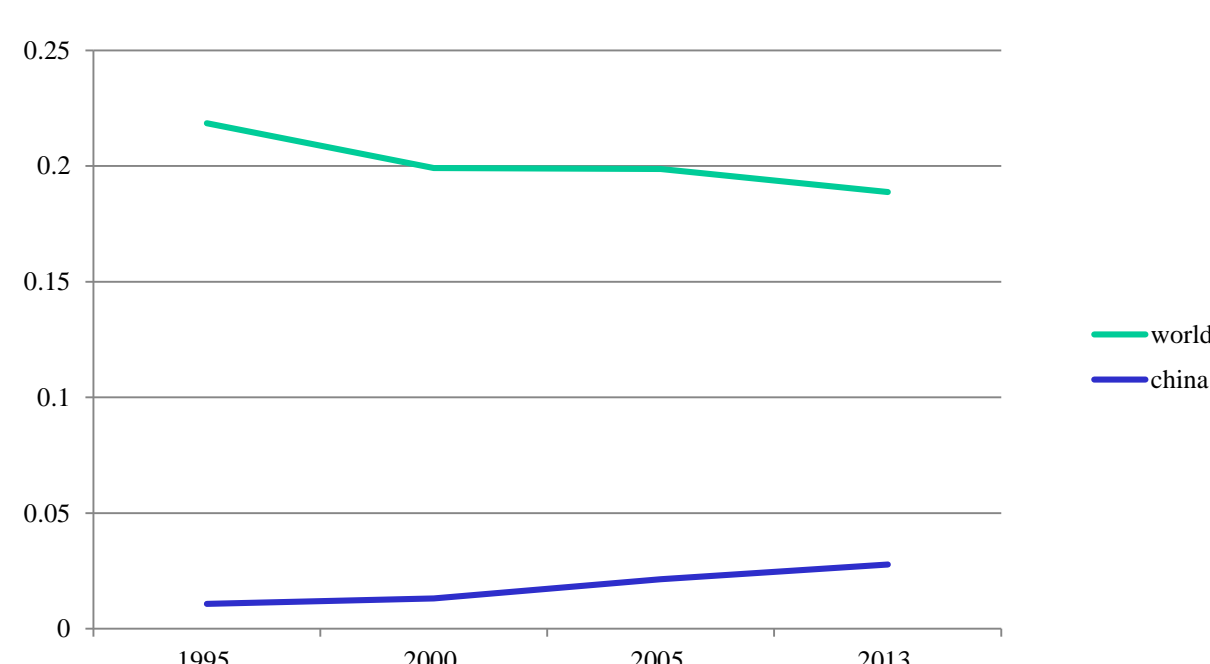


Figure1 The Exports Trends Of Labor-Intensive Industry

Table 1 The Export Structure Of Labor Intensive Industry

| Year                           | 1995  | 2000  | 2005  | 2013  |
|--------------------------------|-------|-------|-------|-------|
| Labor-Intensive Industry       | 33.68 | 32.88 | 28.58 | 26.18 |
| Textile Industry               | 9.64  | 7.57  | 4.60  | 3.45  |
| Other Labor-Intensive Industry | 24.04 | 25.31 | 23.98 | 22.73 |

However, in domestic of china , the share of the export value of labor-intensive industry in all export value declined evidently , from 33.68% in 1995 to 26.18% by 2013 . But if we divided the labor-intensive industry into textiles industry and other labor-intensive industry , we will find that the ratio that was the exports value of textile industry accounted for the total export value declined greatly. When the textile industry was excepted, the proportion that was the exports value of other labor-intensive industry to china's total export value was falling but gently.

## 3.The RTV Of Labor-Intensive Industry

The Figure 2 displayed is the RTV (Revealed Technological Value-Added ) of labor-intensive products (Z standardization) at the year of 1995 and 2013.

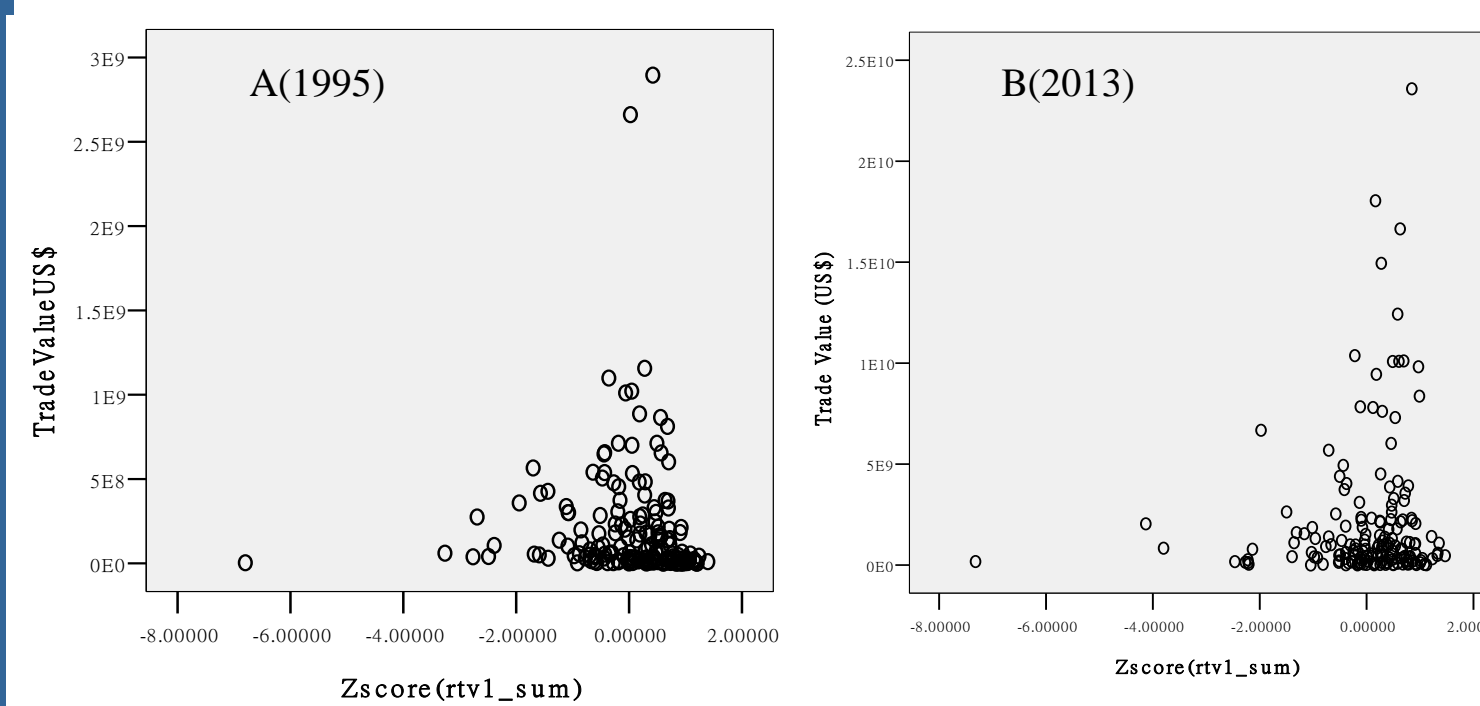


Figure 2 The RTV And Export Value Of Labor-Intensive Industry

Compare the A and B of Figure 2 , it can be found that in 2013, the exports value of many industry have increased dramatically. From the statistical description to the distribution of exports value (Table 2) , we can see that the exports value in 1995 and 2013 are left Skewness ,even more left in 2013, and the Kurtosis in 2013 is higher than in 1995. That means, higher technical value-added labor-intensive industry have more export value than before.

Table2 The Statistical Description To The Distribution Of Exports Value

| Year | Min   | Max  | Skewness | Kurtosis |
|------|-------|------|----------|----------|
| 2013 | -7.32 | 1.47 | -2.99    | 15.37    |
| 1995 | -6.79 | 1.39 | -2.66    | 13.40    |

## 4. The Competitive Analysis Of The Main Industry

The main industries we selected are the top three industries according the exports value (except Textiles) in 1995 and 2013. In 1995, the top three industries are still in the top 10 in 2013. The RCA of the three industries in 1995 and 2013 are greater than zero but they are reduced. It implies that in the global market, the competitiveness are weakened. The increase of the RTV of two industries in 1995 shows that the Technological Value-Added had raised and the other industry has shrunk .

Table3 The Description of The Main Industry

| HS Code | Commodit            | Position |      | RCA  |      | Z-RTV |       |
|---------|---------------------|----------|------|------|------|-------|-------|
|         |                     | 1995     | 2013 | 1995 | 2013 | 1995  | 2013  |
| 9503    | Toys                | 1        | 9    | 7.64 | 3.67 | 0.42  | 0.61  |
| 6403    | Footwear Leather    | 2        | 7    | 4.12 | 2.13 | 0.02  | -0.22 |
| 9405    | Illuminated Signs   | 3        | 8    | 5.03 | 3.66 | 0.27  | 0.69  |
| 8443    | Printing Machinery  | 121      | 1    | 0.08 | 1.95 | 1.14  | 0.85  |
| 9403    | Furniture And Parts | 13       | 2    | 1.09 | 2.6  | 0.05  | 0.17  |
| 8708    | Parts Of Motor      | 31       | 3    | 0.14 | 0.54 | 0.63  | 0.63  |

In 2013, the position of the top three industries are very low in 1995. Especially for the Printing Machinery Industries, the position was 121 in 1995 which has risen to the first place in 2013. The RCA of Printing Machinery industry and Parts Of Motor industry in 1995 were less than 1. That is to say , while the two industries have a big share in Chinese total exports value , but lack the competitiveness in the global market. By 2013, the competitiveness of Printing Machinery industry was strengthened (RCA index bigger than 1). Technological Value-Added of Printing Machinery industry and Parts Of Motor industry were smaller , and Furniture And Parts were bigger.

## 5. Brief Conclusion

Overall, labor-intensive industry of China is competitive but the share of some industries in the international market become smaller gradually. To maintain the competitiveness of labor-intensive products in China, we should selectively develop the industry whose Export Value , RCA, RTV are higher (e.g., Printing Machinery industry Furniture And Parts industry) and promote the industry whose competitiveness is weaker gradually transformation and upgrading(e.g. Footwear Leather).

## 6. Acknowledgement

Profeser Congsheng Wu given some good advice in the research.